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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,913	12/01/2003	Takayuki Kinoshita	JP920020209US1	3308

48583 7590 07/17/2007

BRACEWELL & GIULIANI LLP
PO BOX 61389
HOUSTON, TX 77208-1389

EXAMINER	
DANG, HUNG Q	
ART UNIT	**PAPER NUMBER**
2621	
MAIL DATE	**DELIVERY MODE**
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,913	KINOSHITA ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 December 2003*.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-18* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-3 and 18, drawn to a recording and reproducing apparatus including the feature of "an encode unit that inputs and encodes predetermined stream data; a data storage unit that writes the data encoded by the encoded unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit; and wherein the data storage unit reads other data existing before or after data to be read for decoding the data, in place of the data to be read therefore", classified in class 386, subclass 124.

II. Claims 4-5, drawn to a recording an reproducing apparatus including the features of "an encode unit that inputs and encodes content; a data storage unit that writes data of the content encoded by the encode unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit to thereby reproduce the content; and wherein when the content is fast-forward reproduced or fast-reverse reproduced, the data storage unit shifts data read by the fast-forward reproduction or the fast-reverse reproduction forward or backward such that a rotation latency of the magnetic disk is shortened", classified in class 386, subclass 68.

III. Claims 6-8 and 15-17, drawn to a content reproducing apparatus for reading and reproducing a digital content recorded in a disk-shaped recording medium including the features of "head position estimating means for estimating the present position with respect to the recording medium, of a head for reading the digital content; data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block; and moving destination determining means for determining a data block at which the time required to move the head is the shortest, as a data block to be read next, based on the present position of the head, which has been estimated by the head position estimating means, and the positions of the respective data blocks, which have been calculated by the data position calculating means", classified in class 360, subclass 72.1.

IV. Claims 9-14, drawn to a magnetic disk device including the features of "a magnetic disk that magnetically records data; a magnetic head that reads and writes data from and on the magnetic disk; and a controller that controls a movement of the magnetic head to cause the magnetic head to read and write data from and on a desired position of the magnetic disk; and wherein in place of a data block to be read, which has been specified by a logical block address, the controller causes the magnetic head to read other data block existing before or after the data block", classified in class 386, subclass 69.

The inventions are distinct, each from the other because of the following reasons:

Inventions as disclosed above in Group I and Group II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "an encode unit that inputs and encodes predetermined stream data; a data storage unit that writes the data encoded by the encoded unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit; and wherein the data storage unit reads other data existing before or after data to be read for decoding the data, in place of the data to be read therefore" as recited in claims 1-3 and 18 of Group I, has separate utility such as the features of "an encode unit that inputs and encodes content; a data storage unit that writes data of the content encoded by the encode unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit to thereby reproduce the content; and wherein when the content is fast-forward reproduced or fast-reverse reproduced, the data storage unit shifts data read by the fast-forward reproduction or the fast-reverse reproduction forward or backward such that a rotation latency of the magnetic disk is shortened", as recited in claims 4-5 of Group II. See MPEP § 806.05(d).

Inventions as disclosed above in Group I and Group III are related as subcombinations disclosed as usable together in a single combination. The

subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "an encode unit that inputs and encodes predetermined stream data; a data storage unit that writes the data encoded by the encoded unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit; and wherein the data storage unit reads other data existing before or after data to be read for decoding the data, in place of the data to be read therefore" as recited in claims 1-3 and 18 of Group I, has separate utility such as the features of "head position estimating means for estimating the present position with respect to the recording medium, of a head for reading the digital content; data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block; and moving destination determining means for determining a data block at which the time required to move the head is the shortest, as a data block to be read next, based on the present position of the head, which has been estimated by the head position estimating means, and the positions of the respective data blocks, which have been calculated by the data position calculating means", as recited in claims 6-8 and 15-17 of Group III. See MPEP § 806.05(d).

Inventions as disclosed above in Group I and Group IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious

variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "an encode unit that inputs and encodes predetermined stream data; a data storage unit that writes the data encoded by the encoded unit on a magnetic disk and reads the data written on the magnetic disk; a decode unit that decodes the data read from the magnetic disk by the data storage unit; and wherein the data storage unit reads other data existing before or after data to be read for decoding the data, in place of the data to be read therefore" as recited in claims 1-3 and 18 of Group I, has separate utility such as the features of "a magnetic disk that magnetically records data; a magnetic head that reads and writes data from and on the magnetic disk; and a controller that controls a movement of the magnetic head to cause the magnetic head to read and write data from and on a desired position of the magnetic disk; and wherein in place of a data block to be read, which has been specified by a logical block address, the controller causes the magnetic head to read other data block existing before or after the data block", as recited in claims 9-14 of Group IV. See MPEP § 806.05(d).

Inventions as disclosed above in Group II and Group III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "an encode unit that inputs and encodes content; a data storage unit that writes data of the content encoded by the encode unit on a magnetic disk and reads the data written on the magnetic disk; a

decode unit that decodes the data read from the magnetic disk by the data storage unit to thereby reproduce the content; and wherein when the content is fast-forward reproduced or fast-reverse reproduced, the data storage unit shifts data read by the fast-forward reproduction or the fast-reverse reproduction forward or backward such that a rotation latency of the magnetic disk is shortened" as recited in claims 4-5 of Group II, has separate utility such as the features of "head position estimating means for estimating the present position with respect to the recording medium, of a head for reading the digital content; data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block; and moving destination determining means for determining a data block at which the time required to move the head is the shortest, as a data block to be read next, based on the present position of the head, which has been estimated by the head position estimating means, and the positions of the respective data blocks, which have been calculated by the data position calculating means", as recited in claims 6-8 and 15-17 of Group III. See MPEP § 806.05(d).

Inventions as disclosed above in Group II and Group IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "an encode unit that inputs and encodes content; a data storage unit that writes data of the content encoded by the encode unit on a magnetic disk and reads the data written on the magnetic disk; a

decode unit that decodes the data read from the magnetic disk by the data storage unit to thereby reproduce the content; and wherein when the content is fast-forward reproduced or fast-reverse reproduced, the data storage unit shifts data read by the fast-forward reproduction or the fast-reverse reproduction forward or backward such that a rotation latency of the magnetic disk is shortened" as recited in claims 4-5 of Group II, has separate utility such as the features of "a magnetic disk that magnetically records data; a magnetic head that reads and writes data from and on the magnetic disk; and a controller that controls a movement of the magnetic head to cause the magnetic head to read and write data from and on a desired position of the magnetic disk; and wherein in place of a data block to be read, which has been specified by a logical block address, the controller causes the magnetic head to read other data block existing before or after the data block", as recited in claims 9-14 of Group IV. See MPEP § 806.05(d).

Inventions as disclosed above in Group III and Group IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination that teaches the features of "head position estimating means for estimating the present position with respect to the recording medium, of a head for reading the digital content; data position calculating means for calculating a position of a data block for a digital content to be read next, and positions of other data blocks existing before and after the data block; and moving destination determining

means for determining a data block at which the time required to move the head is the shortest, as a data block to be read next, based on the present position of the head, which has been estimated by the head position estimating means, and the positions of the respective data blocks, which have been calculated by the data position calculating means" as recited in claims 6-8 and 15-17 of Group III, has separate utility such as the features of "a magnetic disk that magnetically records data; a magnetic head that reads and writes data from and on the magnetic disk; and a controller that controls a movement of the magnetic head to cause the magnetic head to read and write data from and on a desired position of the magnetic disk; and wherein in place of a data block to be read, which has been specified by a logical block address, the controller causes the magnetic head to read other data block existing before or after the data block", as recited in claims 9-14 of Group IV. See MPEP § 806.05(d).

The examiner has required restriction between subcombinations usable together. Where applicant elects a subcombination and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is 571-270-1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Dang
Patent Examiner